



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/539,633

06/16/2005

Hidetoshi Nishino

L9289.05137

4694

24257

7590

02/08/2008

STEVENS DAVIS MILLER & MOSHER, LLP

1615 L STREET, NW

SUITE 850

WASHINGTON, DC 20036

EXAMINER

PEACHES, RANDY

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

02/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/539,633

Applicant(s)

NISHINO, HIDETOSHI

Examiner

Randy Peaches

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3.6 and 7 is/are rejected.
- 7) ☐ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6-16-05</u>   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. ***Claims 1-3 and 6-7*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (U.S. Patent Publication Number 2004/0091057 in view of Miya (U.S. Patent Number 6,959,070 B2).

Regarding ***claims 1 and 6-7***, Yoshida discloses a receiving apparatus, which reads on claimed "synchronization processing apparatus," comprising:

- a delay profile management unit (601a), which reads on claim "delay profile generator," that creates a delay profile of a communicating party from a received signal. See paragraph [0188];
- a GI – exceed delayed wave detector, which reads on claim "communication stop period determiner," that determines a guard time (GI), which reads on claim "temporary communication stop," period from a parameter that indicates said communication stop period to the communicating party. See paragraph [0188];
- a ISI replica generator, which reads on claim "timing controller" that sets a delay profile creation timing for the communicating party such that the said GI of the

communicating party determined by the said GI – exceed delayed wave detector and a delay profile creation period for the communicating party in the delay profile generator do not overlap. See paragraph [0008]; and

However, Yoshida fails to clearly render sufficient support as to a path searcher that detects a receiving timing where the delay profile has a peak.

Miya discloses in column 4 lines 27-54 wherein a path searcher that detects a receiving timing where the delay profile has a peak.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Yoshida to include Miya in order to provide a means to obtain the dispreading timing.

Regarding **claim 2**, as the combination of Yoshida and Miya are made, the combination according to **claim 1**, the combination discloses wherein the delay profile management unit (601a), divides time every plurality of channels and creates delay profiles. See Miya, column 4 line 54; and

- the timing controller sets delay profile creation timings on a per channel basis.

See Miya, column 4 lines 49-55 and column 5 lines 5-8.

Regarding **claim 3**, as the combination of Yoshida and Miya are made, the combination according to **claim 1**, the combination discloses the delay profile generator divides time every plurality of sectors and creates delay profiles. See column 3 lines 45-51; and

- the timing controller sets delay profile creation timings on a per sector basis. See column 9 lines 4-9

***Allowable Subject Matter***

2. ***Claims 4 and 5*** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (571) 272-7914. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/539,633  
Art Unit: 2617

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Randy Peaches  
RP



**CHARLES N. APPIAH**  
**SUPERVISORY PATENT EXAMINER**